

Descriptions

- Switching application
- Interface circuit and driver circuit application

Features

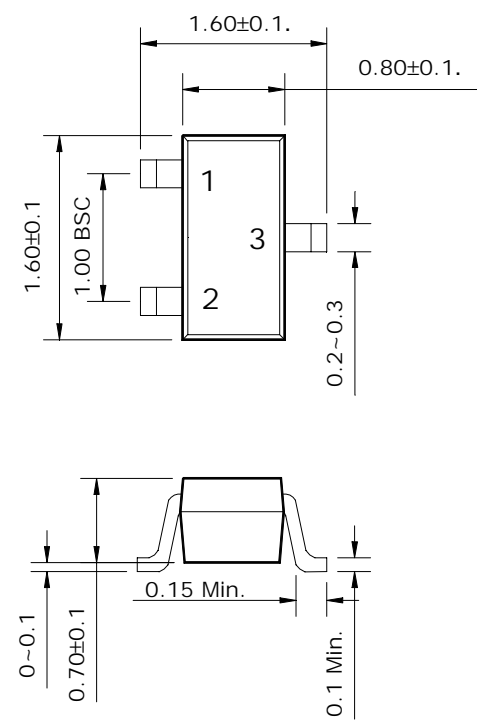
- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- High packing density

Ordering Information

Type NO.	Marking	Package Code
SRA2203E	3R	SOT-523

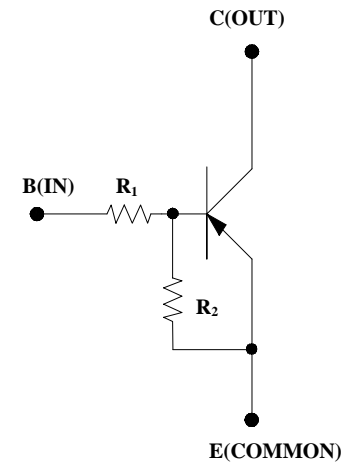
Outline Dimensions

unit : mm



1.60 ± 0.1
 0.80 ± 0.1
 1.60 ± 0.1
 1.00 BSC
 $0.2 \sim 0.3$
 0.70 ± 0.1
 0.15 Min.
 $0 \sim 0.1$
 0.1 Min.

• Equivalent Circuit



B(IN) R_1 C(OUT)
 R_2 E(COMMON)

PIN Connections

1. Base
2. Emitter
3. Collector

R_1	R_2
22K Ω	22K Ω

Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Out Voltage	V_O	-50	V
Input Voltage	V_I	-40	V
Out Current	I_O	-100	mA
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ 150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output Cut-off Current	$I_{O(OFF)}$	$V_O=-50V, V_I=0$	-	-	-500	nA
DC Current Gain	G_I	$V_O=-5V, I_O=-10mA$	70	120	-	-
Output Voltage	$V_{O(ON)}$	$I_O=-10mA, I_I=-0.5mA$	-	-0.1	-0.3	V
Input Voltage (ON)	$V_{I(ON)}$	$V_O=-0.2V, I_O=-5mA$	-	-2.1	-3.0	V
Input Voltage (OFF)	$V_{I(OFF)}$	$V_O=-5V, I_O=-0.1mA$	-1.0	-1.2	-	V
Transition Frequency	f_T^*	$V_O=-10V, I_O=-5mA$	-	200	-	MHz
Input Current	I_I	$V_I=-5V$	-	-	-0.36	mA

* : Characteristic of Transistor Only

Electrical Characteristic Curves

Fig. 1 $I_o - V_{I(ON)}$

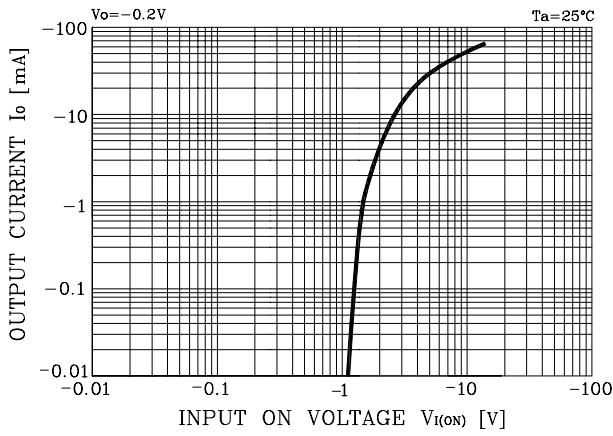


Fig. 2 $I_o - V_{I(OFF)}$

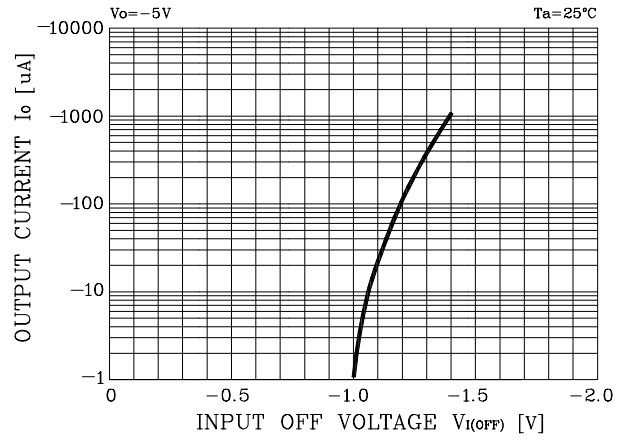


Fig. 3 $G_I - I_o$

